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Pat Quinn, Governor Marc Miller, Director

December 21, 2012

Mr. Glen Westman Lake County Stormwater Management Commission 500 W. Winchester Road, Suite 201 Libertyville, IL 60048

RE: Chicago Bears Football Club Addition, Lake Forest, Lake County Endangered Species Consultation Program EcoCAT Review #1305121

Dear Mr. Westman:

The Department received this proposed action from Christopher B. Burke Engineering, Ltd., for consultation in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The Chicago Bears Football Club training facility is located in Lake Forest, Illinois, directly adjacent to, and upstream of, the Middlefork Savanna Forest Preserve, a property of the Forest Preserve District of Lake County. This property is designated as the **Middlefork Savanna Illinois Natural Areas**Inventory (INAI) Site and is dedicated as an Illinois Nature Preserve. The Nature Preserve will be receiving storm water discharged from the expanded parking areas of the Chicago Bears' facility.

Consequently, it is the opinion of the Department the **Middlefork Savanna Nature Preserve** is likely to be adversely affected by expansion of the facility. It is the Department's opinion the proposed action is unlikely to adversely modify essential habitat for the **Blanding's Turtle** or of state-listed plants within the Forest Preserve. The Department makes the following observations.

To account for the increased storm water volume, a new wet detention basin will be excavated surrounding existing Wetland #5, which will be maintained in its existing condition so far as is possible. This naturalized new basin will receive the storm water discharged from the expanded parking facilities, and the wetland vegetation and bacterial organisms will provide treatment for oils, fluids, and polycyclic aromatic hydrocarbons (PAH's) washed from parking surfaces. Discharges from this basin will be routed through the existing storm water infrastructure to existing dry basin #2, which will be rehabilitated to include a rain-garden-like infiltration field through which the run-off will pass before reaching the primary discharge structure, from whence it will enter the Nature Preserve.

The Department believes this system, when fully implemented and functional, is likely to improve water quality above that of run-off now entering the Nature Preserve. However, the Department understands the projects' managers hope to begin construction in January. Winter construction activities pose many hazards, particularly where environmentally-sensitive areas lie downstream. The proposed design relies heavily on biological activity and organic materials to filter and clean storm water. Biological activity will occur only at very low levels in the winter.

These facilities are not intended or expected to remove large volumes of sediment or suspended solids. It will be problematic to construct the storm water management system and the parking areas concurrently in winter months without risking damage to the incipient storm water infrastructure and the adjacent Nature Preserve, specifically with reference to siltation and sedimentation.

This particular Nature Preserve has been severely damaged at other locations on its periphery by sediment originating off-site. At least one party responsible is currently addressing its liability for damages to the Nature Preserve. (Apart from constituting the criminal offence of a Class A Misdemeanor, damage to a Nature Preserve subjects the liable party to civil penalties of up to \$10,000 per day of continuing violations.) It will be important for the Chicago Bears organization to minimize the risk of incurring similar fines and penalties during the period before the proposed storm water management system becomes fully functional.

Recommendation #1: The Department recommends that the storm water facilities be constructed prior to disturbance of the proposed parking areas. This will help assure the enhanced facilities are available to minimize any siltation or sedimentation resulting from construction of the parking areas.

Recommendation #2: The Department recommends rehabilitating the drain in Basin #2 prior to beginning construction of the new basin around Wetland #5, and that existing drainage be temporarily routed or pumped around the "rain garden" location in Basin #2 until its construction is completed.

Recommendation #3: The Department recommends that, during and soon after the construction of the new basin at Wetland #5, all areas of disturbed soils draining to the structure should receive high-intensity erosion control treatment, such as being mulched or temporarily covered with jute mats, to control saltation of soil particles. Such measures will diminish particle loading in the new facilities while they achieve equilibrium.

Recommendation #4: The Department recommends the permittee obtain and preserve water samples at the discharge point of Basin #2 and note the discharge volume for each discharge event during and for 30 days following completion of construction to document the quality of water entering the Nature Preserve. This measure will demonstrate the effectiveness of the preventive and protective measures and provide objective data to address any potential allegations of harm to the Nature Preserve.

Consultation on the part of the Department is terminated, unless the Stormwater Management Commission desires additional information or advice related to this proposal. In accordance with 17 Ill. Adm. Code 1075.40(h), the Commission must notify the Department of its decision regarding these recommendations, whether it will:

• Proceed with the action as originally proposed;

- Require the action to be modified per Department recommendations (please specify which measures if not all will be required); or
- Forgo the action.

This consultation is valid for two years unless new information becomes available which was not previously considered; or the proposed action is modified; or additional species, essential habitats, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review primarily reflects the information existing in the Illinois Natural Heritage Database at the time of this consultation, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments.

If additional protected resources are encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action. Please contact me if you have questions regarding this review.

Sincerely,

Keith M. Shank

Impact Assessment Section

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Division of Ecosystems and Environment

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cc: Julie Gangloff, Christopher B. Burke Engineering, Ltd.